

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
South Central Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Virginia Marble Manufacturers, Inc.
1201 Fifth Avenue, Lunenburg County, Kenbridge, Virginia
Permit No. (SCRO) 30743

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Virginia Marble Manufacturers, Inc. has applied for a Title V Operating Permit for its 1201 Fifth Avenue, Kenbridge facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact: _____ Date: August 13, 2003

Air Permit Manager: _____ Date: _____

Regional Director: _____ Date: _____

FACILITY INFORMATION

Permittee

Virginia Marble Manufacturers, Inc.
P. O. Box 766
Kenbridge, VA 23944

Facility

Virginia Marble Manufacturers, Inc. - Plant 1
1201 Fifth Avenue

AIRS ID No. 51-111-00016

SOURCE DESCRIPTION

SIC Code: 3088 – Plastic Plumbing Fixtures

Virginia Marble Manufacturers, Inc. is a manufacturer of cultured marble (from marble dust and polyester resin) covered by Standard Industrial Classification (SIC) Code 3088. The facility has the potential to operate twenty-four (24) hours per day, seven (7) days per week, fifty-two (52) weeks per year. The annual raw material (casting resin and gel coat) throughput limitations are based on producing 8,057.5 tons of cultured marble per year.

The facility is a Title V major source of styrene. This source is located in an attainment area for all pollutants, and is a PSD minor source. The facility was previously permitted under a Minor NSR Permit issued on October 24, 1986, and amended on April 29, 1997, October 1, 1987, March 15, 1994, July 15, 1996, February 20, 1998, July 23, 1998, November 23, 1998, and April 1, 2003.

COMPLIANCE STATUS

The facility is inspected at least once every other year. The full compliance inspection report issued on April 19, 2002 stated that the facility was in compliance.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following :

See permit Condition II.A.

EMISSIONS INVENTORY

A copy of the 2002 annual emission update is attached. Emissions are summarized in the following tables.

2002 Actual Emissions

| | 2002 Criteria Pollutant Emission in Tons/Year | | | | |
|----------------------|---|----|-----------------|------------------|-----------------|
| Emission Unit | VOC | CO | SO ₂ | PM ₁₀ | NO _x |
| Marble manufacturing | 30.6 | | | 2.88 | |
| | | | | | |
| Total | 30.6 | | | 2.88 | |

2002 Facility Hazardous Air Pollutant Emissions

| Pollutant | 2002 Hazardous Air Pollutant Emission in Tons/Yr |
|-----------|--|
| Styrene | 30.6 |
| | |

EMISSION UNIT APPLICABLE REQUIREMENTS - Marble manufacturing Equipment

Limitations

Conditions III.A.1.- 5. contain the control requirements. These are taken from the NSR permit issued 04/01/03.

Conditions III.A.6.- 9. contain the throughput limitations. These are taken from the NSR permit issued 04/01/03.

Conditions III.A.10. – 14. contain the emissions limitations. These are taken from the NSR permit issued 04/01/03. The limits for the NSR permit were based on the permitted throughput and the emission factors for styrene from open molding operations developed by the Composite Fabricators Association (CFA) for MACT Subpart WWWW. These were published on July 23, 2001. Attachment E shows the permitted emissions calculations.

Conditions III.A.15. 16. contain the opacity limitations. These are taken from the NSR permit issued 04/01/03.

Monitoring

Condition III.A.5. requires a device to monitor pressure drop across the fabric filters.

Condition III.B. contains the opacity periodic monitoring. Monitoring of visible emissions will be required of the source (spray booth stacks V1, V2, V12, V13, V 14, V19, and V20 and sanding and grinding stacks V15, V16, V17, and V18) at least one time per week, when the units are operating. They are to observe for the presence of visible emissions from the stack. If visible emissions are observed, the permittee will have the option to take timely corrective action to resume operations without visible emissions or perform a VEE in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions compliance. The permittee will keep a log of observations, any VEE recordings, and any corrective actions. If the unit has not operated during the week, this fact shall be noted in the log, and that the visible emission observation was not required.

Recordkeeping

Condition III.C. contains the record keeping requirements. These are taken from the NSR permit issued 04/01/03. The permit includes requirements for maintaining records of all monitoring and testing required by the permit.

Testing

Condition III.D. states that the permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations. This is taken from the NSR permit issued 04/01/03. The permit does not require source tests (stack tests) on casting, spray/brush gel coat booths and sanding, mold making/repairing, and grinding booth dust collection system(s). The casting resin's and spray/brush gel coat's VOC emissions can be calculated using approved CFA emission factors and VOC content of the resins to demonstrate compliance to the permit limits. Since this source is not major for PM-10 emissions, a weekly visual observation of the dust collection system(s) exhaust stack is adequate periodic monitoring to demonstrate compliance to the PM-10 emission limit. The Department and EPA have the authority to require testing, but stack testing is not required for this facility.

Reporting

The only reporting that is required is in the General Conditions and that is stated below.

Streamlined Requirements

There are no streamlined requirements

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by ' 2.1-20.01:2 and ' 10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement NO. 3-2001".

This general conditions cites the entire Article(s) that follow:

B.2. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources

B.3. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources]

This general condition cites the sections that follow:

- B. 9 VAC 5-80-80. "Application"
- B.2. 9 VAC 5-80-150. "Action on Permit Applications"
- B.3. 9 VAC 5-80-80. "Application"
- B.4. 9 VAC 5-80-80. "Application"
- B.4. 9 VAC 5-80-140. "Permit Shield"
- B.5. 9 VAC 5-80-80. "Application"]

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excesses emissions reporting within 4 hours. Section 9 VAC 5-80-250 also requires malfunction reporting; however, reporting is required within 2 days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to this section including Title 5 facilities. Section 9 VAC 5-80-250 is from the Title 5 regulations. Title 5 facilities are subject to both Sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within 4 day time business hours of the malfunction.

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in section 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition V and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

V.2.d. 9 VAC 5-80-110. Permit Content

V.2.d. 9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

STATE ONLY APPLICABLE REQUIREMENTS

There are no state only requirements.

FUTURE APPLICABLE REQUIREMENTS

The facility will be subject to Subpart WWWW - National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production. The compliance date is April 21, 2006.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

| Emission Unit No. | Emission Unit Description | Citation ¹ (9 VAC_) | Pollutant Emitted (5-80-720 B.) | Rated Capacity (5-80-720 C.) |
|-------------------|-----------------------------|-----------------------------------|---|-----------------------------------|
| HW1 and HW2 | 2 Burnham hot water heaters | 5-80-720 B.1. | Sulfur dioxide and nitrogen dioxide | 1.2 MMBtu/hr #2 fuel oil fired |

¹The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

The draft permit was placed on public notice in the Kenbridge-Victoria Dispatch from May 28, 2003 to June 27, 2003 and no comments were received.